

as disclosed and claimed are both (A) species under a claimed genus and (B) related, then the question of restriction must be determined by both the practice applicable to election of species and the practice applicable to other types of restrictions such as those covered in MPEP § 806.05 - § 806.05(j). If restriction is improper under either practice, it should not be required.” It is respectfully submitted that the Examiner has not apprised Applicant as to why the restriction is justified under these guidelines. Also, exception is taken with respect to the capricious nature of the Examiner’s response in connection with Applicant’s traversal of the restriction, which is demonstrated by the Examiner’s failure to follow proper procedure in making the restriction, as outlined in the sections of Chapter 800 of the MPEP pointed out by Applicant.

The Examiner also maintains the rejection of claims 1-6 and 13-18 under 35 U.S.C. § 103 as allegedly being obvious over Ogawa (U.S. Patent Application Publication No. 2003/0132987) in view of Mori et al. (Japanese patent publication no 2000-169977). In the final Action, the Examiner newly cites several parts of the Ogawa publication while withdrawing other citations previously relied upon, and the Action was made final. Applicant respectfully submits the finality of the Action is improper because the Examiner has, in effect, closed prosecution after changing her position, and this position was not changed in response to any amendments made to the claims. Nevertheless, Applicants traverse the newly formulated rejections because the Ogawa and Mori et al. documents, whether considered individually or in any combination, fail to teach or suggest each and every recited feature set forth in the claims, for the following reasons:

With respect to the feature recited in independent claim 1 of “forming a resist mask on the wiring using a second solution ejector,” the Examiner now refers to paragraphs 0058, 0109 and 0234 of the Ogawa et al. publication. It is respectfully submitted, however, that the description in paragraph 0058 of using a ejection head to form a resist does not teach or suggest so forming a resist on a wire, which was formed using a first solution ejector. Rather, the Ogawa publication describes, for example, in paragraph 0232, “metal material ... selectively ejected from the heads to thereby form metal wiring on a substrate.” It is respectfully submitted that the selective deposition of wiring described in Ogawa does not

teach or suggest the claimed combination of specific features related to forming a resist on wiring using a solution ejection, and using this resist mask as a mask to etch the wiring.

The next recited feature of claim 1 of “etching the wiring using an atmospheric-pressure plasma device having a linear plasma generator using the resist mask as a mask.” With respect to this claimed feature, the Examiner refers to paragraph 0184. However, Ogawa appears to describe, at paragraphs 0184 and 0200-0204, that a plasma treatment process is only used for increasing ink whettability (see, steps S4 and S5 of Figure 29) or to form “ink affinity-imparting surfaces” and “ink-repellence-imparting surfaces” (see, Figures 33 and 34), which do not appear to involve a mask, much less the claimed mask using the resist as a mask. Nowhere else does the Ogawa publication describe using a plasma treatment process to etching a wiring using a resist as a mask, as set forth in claim 1. For analogous reasons, it is respectfully submitted that the Ogawa publication also fails to teach or suggest the claimed subject matter recited in claim 3, which includes *inter alia* the features of “forming a resist mask at least on the wiring using a solution ejector . . . etching the wiring using an atmospheric-pressure plasma device having a linear plasma generator using the resist mask as a mask.”

On page 3 of the Office Action, the Examiner asserts that the Mori et al. document teaches etching a metal layer using high frequency plasma under atmospheric pressure. However, it is respectfully submitted that the abstract of Mori et al. does not remedy the shortcomings pointed out with respect to Ogawa because Mori et al. does not describe “forming a resist mask on the wiring using a second solution ejector . . . etching the wiring using an atmospheric-pressure plasma device having a linear plasma generator using the resist mask as a mask,” as recited in claim 1, and similar features set forth in claim 3. Thus, even if one were to consider a combination these documents, for the sake of argument, any such combination would not have taught or suggested the combinations of specific features set forth in Applicant’s claims.

For all the above reasons, the rejection of independent claims 1 and 3 should be withdrawn.

Turning now to independent claims 13-15, the Examiner appears to misunderstand traversal in Applicant's response of March 13, 2006 (see, pages 10-11), of the rejection of these claims over Ogawa, Mori et al. and the caselaw *St. Regis Paper Co. v. Bemis Co. Inc.* 193 USPQ 8 (7th circuit 1997). Specifically, the Examiner states:

Applicant contends that the case law St. Regis paper, Co. V. Bemis Co. Inc. 193 USPQ 8, 11 (7th circuit 1977) does not exist. In response to applicant that this case law still exist (see USPQ for detail). (See, page 4, lines 11-13.)

However, Applicant made no such statement (i.e., that the case law does not exist). Rather, Applicant pointed out that the Examiner is attempting to bridge Ogawa's evidentiary gaps by resorting to so-called *per se* rules of obviousness allegedly established by the cited caselaw, but that no such rules exist. Furthermore, the facts in the *St. Regis Paper Co.* case include both parties agreeing that a claimed feature involving use of multiple layers to achieve the effect of many bags within one was known in the industry for many years. In contrast, the Examiner has shown no teaching whatsoever of "a plurality of linearly-arranged plasma generators ...," as claimed.

Next, the Examiner proceeds to mention *In re Woodruff*, whose holding concerns criticality of overlapping ranges. It is respectfully submitted that the holding in *Woodruff* is not relevant to claimed subject matter including "a plurality of linearly-arranged plasma generators" In fact, the statements in the Action concerning *Woodruff*, "Where patentability is said to be based upon a particular chosen limitation or upon another variable recited in the claim, the applicant must show that the chosen limitations are critical," is too broad, not based on evidence from the prior art, and more significantly, is not representative of the actual decision in this case. Indeed, the facts considered in *Woodruff* include a prior art reference that explicitly taught a concentration of carbon monoxide (CO), which overlapped with a claimed concentration of CO recited in one of the applicant's claims. In the instant case, the applied patents do not teach or suggest the claimed features of "a plurality of linearly-arranged plasma generators" Because a "plurality" necessarily requires more than one, and the Examiner has provided no reference teaching this claimed feature, much less "linear-arranged plasma generators ...," and furthermore, the Examiner admits that the Ogawa and Mori et al. patents fail to teach or suggest "a plurality of linearly-arranged plasma

generators ...," no *prima facie* case of obviousness has been established. Furthermore, because there is no range claimed in the context of the holding in *In re Woodruff*, there simply is no parallel to be drawn from the *Woodruff* case that would support the Examiner's position.

The Examiner's reliance on *St. Regis Paper Co. v. Bemis Co. Inc.* and *In re Woodruff*, at best, amounts to an attempt to fit a square peg in a round hole because it does not teach the claimed features admittedly missing in Ogawa and Mori et al. and inaccurately interprets the law to imply existence of some Examiner-fabricated *per se* rules of obviousness. This rejection, therefore, cannot be sustained.

The remaining claims under consideration depend from one of allowable independent claims 1, 3 and 13-15, and are therefore allowable at least for the above reasons, and further for the additional features recited.

Based on the forgoing, Applicant respectfully submits that claims 1, 3-6 and 13-18 are allowable, and that withdrawn claims 7-12 and 19-24 should be rejoined and also allowed without further delay.

Respectfully submitted,

/John F. Guay, Reg.# 47248/
John F. Guay

NIXON PEABODY LLP
Suite 900, 401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000